Boulderfield Forest is an uncommon high-elevation community type that occurs where large boulders deeply cover the ground. Soil exists only as small accumulations between and on boulders. These closed-canopied forests are dominated by yellow birch (*Betula alleghaniensis*), due to its ability to root upon boulders. The understory is very sparse due to the abundance of rock, although mountain maple (*Acer spicatum*) or striped maple (*Acer pensylvanicum*) is often present. The understory is not well developed due to the abundance of rock substrate. The shrub skunk currant (*Ribes glandulosum*) often forms dense cover on boulders. The herb layer is typically sparse, but often includes rockcap fern (*Polypodium appalachianum*) and a few other species of cool northern hardwood forests. The rare mountain bittercress (*Cardamine clematitis*) and trailing wolfsbane (*Aconitum reclinatum*) frequently occur in this community.

Canada Hemlock Forest communities are relatively common, though Canada hemlock (*Tsuga canadensis*) is a common component of many cove forests. They occur in sheltered coves and slopes, at middle elevations in the mountains. They are dominated by Canada hemlock, with only small numbers of cove hardwoods. The understory may be sparse in the deep shade of the canopy or dominated by dense great rhododendron (*Rhododendron maximum*) and sometimes other evergreen heaths. Herbs are usually a sparse collection of herbs from surrounding cove areas.

Carolina Hemlock Bluff is considered rare because its dominant species, Carolina hemlock (*Tsuga caroliniana*), is restricted to southern Virginia, western North Carolina, eastern Tennessee, northwestern South Carolina, and northern Georgia. Carolina Hemlock Bluffs usually occur on rocky, acidic soils on steep slopes, bluffs, and gorge walls. Other tree species of dry, acidic sites may be present. The understory may range from absent to a dense layer of Catawba rhododendron (*Rhododendron catawbiense*) or mountain laurel (*Kalmia latifolia*). Herbs may include common species such as partridgeberry (*Mitchella repens*), teaberry (*Gaultheria procumbens*), galax (*Galax urceolata*), or others.

Chestnut Oak Forest is a common mountain community at low to moderate elevations on fairly dry soils. Chestnut oak (*Quercus montana*) and scarlet oak (*Quercus coccinea*) are the dominant canopy trees, though other species may be present such as red oak (*Quercus rubra*), white oak (*Quercus alba*), black oak (*Quercus velutina*), hickories (*Carya* spp.), pines (*Pinus* spp.), yellow poplar (*Liriodendron tulipifera*), and Carolina hemlock (*Tsuga caroliniana*). The understory frequently contains sprouts of American chestnut (*Castanea dentata*), as well as other species of dry, acidic soils. The shrub layer varies from open to dense, with thickets of mountain laurel (*Kalmia latifolia*), great rhododendron (*Rhododendron maximum*), and others.

Fraser Fir Forest is a very rare type that occurs only at very high elevations. Undisturbed examples are dominated by a dense canopy of Fraser fir (*Abies fraseri*), with smaller numbers of red spruce (*Picea rubens*), yellow birch (*Betula alleghaniensis*), mountain- ash (*Sorbus americana*), and other high-elevation trees. In good examples, the understory and herb layers are sparse and limited to species of very high elevations. Most examples have been degraded by canopy death due to the non-native pest the balsam wood adelgid, and have numerous canopy